A
CATALOGUE
OF
CHEMICAL APPARATUS.

LONDON:

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CHANCERY-LANE.

1800.

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A Liſt of the Inſtruments and Utenſils requiſite for Chemical Experiments has long been wiſhed for by many; and the difficulty experienced by the lovers of this ſcience in procuring the various apparatus neceſſary for the advantageous proſecution of their favourite ſtudy has not a little retarded the progreſs which otherwiſe might have been made in this department of knowledge. No apology, therefore, can be neceſſary for offering to the Public the preſent brief Compilation, which is meant not only to deſcribe ſhortly the articles that are generally neceſſary in a Laboratory, but to point out thoſe Artiſts or others who, by the attention they have paid to this ſubject, are capable of aſſiſting the tyro in the choice of his apparatus.

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A
CATALOGUE,
&c.

LABORATORY.

TWO Rooms are abſolutely neceſſary for this purpoſe: the one as an operating place, the other for the purpoſe of keeping ſuch articles, required in Experimental Philoſophy, as might be injured by the corroſive fumes of the Laboratory. In the choice of the latter, a well lighted place ſhould be preferred, where plenty of water can be procured, and the means of procuring a plentiful circulation of atmoſpheric air both for the advantage of combuſtion and the preſervation of health.

FURNACES, &c.

MANUFACTURED AND SOLD BY

R. AND G. KNIGHT, FOSTER-LANE,
CHEAPSIDE.

An Improved one on the Principle of Dr. Black's, of Edinburgh, but capable of performing the following Operations: Cupelling of Gold and Silver; the Fuſion of any of the Metals under the Heat of melting Iron; Diſtillation by the Glaſs Retort 5 15 in a Sand Heat, or by the Earthen Retort in the open Fire, for the Production of moſt of the Gaſes where Heat is required; Gentle Digeſtion of Tinctures; Evaporation, &c. &c.

A ſmall Furnace compoſed of Black-lead Pots, as a Reverbatory for Earthen or Coated Glaſs Retorts, and the Decompoſition of Bodies, by paſſing through heated Mediums.

A Brick Furnace for the higher Degrees of Heat in the Fuſion of Iron, Steel, Manganeſe, &c. may be built from   to any Price, according to Size.

A Sand-heat Furnace, capable of working 3 Two-quart Retorts and ſundry Digeſting-veſſels, built of Brick; with Regiſter, &c.

A Portable Forge on an improved Plan, with a Jointed Blow-pipe and Lamp attached, deſigned chiefly for Mineralogical Experiments.

A Four-gallon Still ſet in Brick, with two Heads to the Still, one for Odorous Bodies, the other as uſual. The firſt ſhould have the Refrigeratory on the Head, the other cooled by the Worm Tub.

An Eight-gallon Boiler ſet in Brick, for Evaporating in the large way, making a Balneo, and for Experiments in Brewing and Fermenting. —the Boiler of Iron.

Mortars and Peſtles in Glaſs, Wood, Iron, Steel, Porcelain, Bell metal, Marble, and Agate, in Sizes.

An Improved Veſſel in Tinned Copper for ſeparating Eſſential Oils of different Specific Gravities.

Wooden Stand for Receivers, by the Sand Furnace, with a Regulator and Screw for heightening or depreſſing at Pleaſure.

Caſt-iron ditto, with Clips and Screws for Quilled and Tubulated Receivers in Compound Diſtillations.

Caſt-iron Sand-pans in Sizes.

Caſt-iron Crucibles and Caſting-cones for metals.

Caſt-iron Retorts.

Upright Wrought-iron ditto for forming Oxygen Gas from Manganeſe, with Conducting-pipe.

Iron Ladles in Sizes.

Ingots on an Improved Plan, for the Receipt of Fuſed Metals.

Black-lead Crucibles in Sizes.

Square Heſſian ditto.

Skittle Pots ditto.

Supporting-ſtands and Covers for ditto.

Muffles or Teſting-ovens with Pans.

Cupels for Aſſaying.

Enamel Pans and Covers.

Earthen Retorts and Tubes.

Calcining-pots and Stirrers.

Iron Fire-tongs for Crucibles, &c. as follows:—

Straight-jointed Tongs;
Skittle Pots ditto;
Bent Thumb ditto;
Cupel ditto;

Iron Tongs with Platina Mouths ; Raker and Shovel.

Small Still and Refrigeratory, on an Improved Principle, in Tinned Copper, adapted to be uſed with Black's Furnace.

Laboratory Scales and Weights in Sizes.

Magnets.

Touchſtone and Turkey Stone for the coloured Streak of Bodies.

Leaden Retorts and Receivers for the Diſtillation of the Fluoric Acid.

Leaden Bottles for ditto.

Furnaces and Iron Work manufactured agreeably to the Patterns required.

All the Metals and principal Semi-Metals in ſuitable Forms for Chemical Experiments.

Raſping-mills and Flatting-rollers for the mechanical Reduction of Bodies.

PNEUMATIC APPARATUS, &c.

MANUFACTURED AND SOLD BY

W. H. PEPYS, JUN. NO. 24, POULTRY.

A Gaſometer for receiving and expending Gaſes; with Regiſters, Blow-pipe, Gas-holders, and Pneumatic Ciſtern, according to the lateſt Improvements.

Woulfe's Apparatus, conſiſting of three Three-necked Bottles, each containing about two-thirds of a Quart; one Set of ground Conducting-tubes and Stoppers, and one Set of Tubes to be adapted with Corks, capable of being uſed with different ſized Receivers.

Pneumatic Ciſtern, capable of containing 12 Gallons of Water, with Shelves to ſupport Receivers of different Sizes and Shapes, manufactured in Japanned Tin, and appropriated for ſuch of the Gaſes as can be retained over Water.

Smaller ditto, intended for the Table, and adapted for the Lamp Furnace.

Quart Glaſs Jars or Receivers, mounted with Braſs Stop-cocks for receiving or expending Gaſes.

Elaſtic Bottles and Bladders, mounted with Braſs Stop-cocks and Adopting-ſockets to the Glaſs Receivers.

Glaſs Jars in Sizes, for Experiments on the Gaſes, per Set.

Eudiometers for aſcertaining the Proportion of Oxygen contained in the Gas ſubmitted to the Action of Nitrous Gas, divided into Cubic Inches and Troy Ounces of diſtilled Water.

Cubic Inch and Ounce Troy Meaſures ſuitable to the Eudiometer.

Eudiometers for aſcertaining the Quantity of Oxygen by Hydrogen Gas and the Electric Spark.

Pepys's Mercurial Gaſometer, for the Receipt of ſuch Gaſes as cannot be maintained over Water without Decompoſition: by this Apparatus with 16 lbs. of Mercury the Gaſes are more eaſily received and expended than with a Ciſtern containing 4cwt. conſtructed on the common principle. See Phil. Mag. Vol. V.

Transfer and other auxiliary Apparatus to the Mercurial Gaſometer, for compound Experiments on the Gaſes.

Flaſks with bent Tubes for extricating Gaſes from ſolid Subſtances by Acid Menſtrua.

Ditto, ditto, ſtoppered for the Addition of freſh Materials.

different Sizes and Shapes, manufactured in Japanned Tin, and appropriated for ſuch of the Gaſes as can be retained over Water.

Smaller ditto, intended for the Table, and adapted for the Lamp Furnace.

Quart Glaſs Jars or Receivers, mounted with Braſs Stop-cocks for receiving or expending Gaſes.

Elaſtic Bottles and Bladders, mounted with Braſs Stop-cocks and Adopting-ſockets to the Glaſs Receivers.

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Ditto, ditto, ſtoppered for the Addition of freſh Materials.

Ditto, ditto, for accurate Experiments, with Acid-holders and Cocks, by which the exact Quantity of the Gas extricated may be aſcertained.

2 oz. Retorts for Diſtillations with the Lamp Furnace.

Ditto ditto, tubulated and ſtoppered.

6 oz. ditto.

Ditto, with Acid-holders and Cocks.

12 oz. ditto, 24 oz. ditto, 3 Pint ditto, 2 Quart ditto for Sand Bath, plain, tubulated, and with Acid-holders and Cocks.

4 oz. Receivers intended for the 2 oz. Retorts.

Ditto, ditto, tubulated for ditto.

12 oz. Receivers for the 6 oz. Retorts.

Ditto, ditto, tubulated.

Ditto, ditto, quilled and tubulated.

3 Pint, 2 Quart, and Gallon Receivers for the Retorts, ſuitable to the Sand Bath, plain, tubulated and quilled.

Digeſters and Bolt Heads, for Tinctures, &c.

Alembics, for Diſtillation of Spirits and Eſſential Oils.

Nooth's Apparatus Improved, for impregnating Water and Alkaline Solutions with Carbonic Acid.

Ditto, ditto, packed in a Travelling-caſe.

Glaſs Tubes for Conducting Pipes, bent to any Form required, ſtraight and in Sizes.

Veſſels in Sizes, for pouring off Fluids, for holding Solutions, &c. in Analyſis; with Spouts, &c.

Filtering Funnels in Sizes.

Filtering-ſtand, containing 6 Receivers, and Funnels, for the Separation of Precipitates in Analyſis.

Evaporating-diſhes in Glaſs; ditto, ditto, in Porcelain; in Sizes.

Glaſs Receivers, and Funnels, for ſeparating Eſſential Oils from the Impregnated Water in Diſtillation.

Lamp Furnace for Diſtillation, Evaporation, Cryſtallization and Digeſtion, with Sliding Clips, Wires, and Argand's Lamp.

Ditto, ditto, on a more expenſive Principle, in Mahogany, &c.

Small Balneo, with a Thermometer and Spirit Lamp for drying Precipitates under certain Temperatures in Analyſis.

Watt's Simplified Apparatus for making the Gaſes; with Furnace, &c.

Ditto, ditto, Portable, to be uſed with a Culinary Fire.

Spatulas in Iron, Steel, Wood, and Ivory.

Pallet and Bolus Knives.

Beam and Scales, very accurate for Analyſis or Specific Gravity of Bodies.

Weights in a Caſe, from 1000 Grains downwards, in decimal Parts.

Set of Needles, formed of the different Metals, for aſcertaining the Hardneſs of Minerals.

Improved Blow-pipes, with Jets, in Sizes, for Mineralogy.

Platina and Silver Spoons for ditto.

Portable Apparatus for a Mineralogiſt, in a Mahogany Caſe, *with Fluxes*.

Mineralogical Table, with Bellows, &c. conſiſting of 3 Drawers fitted up with the moſt uſeful and neceſſary Appendages in the Examination of Minerals.

Calorimeters.

Veſſels for Frigorific Experiments.

Apparatus various for ditto, ditto.

Thermometers filled with Alcohol, Mercury, &c. for aſcertaining the Degree of Heat of Boiling Oils, or of Freezing Mercury.

Apparatus for paſſing Volatile Subſtances through heated Mediums for Decompoſition.

Silver Crucibles (from Reduced Luna Cornea) for the Digeſtion of Siliceous and other Stones with Alkali.

Tubes of Safety.

Apparatus of all Kinds manufactured agreeably to the Plans and Deſcriptions of Lavoiſier, Nicholſon, Schmeiſſer, Magellan, Berkenhout, Gren, and Bouillon La Grange.

TESTS AND REAGENTS.

The following are prepared with the greateſt attention to their purity, which is of ſo much conſequence to the Chemiſt and Mineralogiſt in his Analytical Obſervations, by Meſſrs. ALLEN and HOWARD, Plough-court, Lombard-ſtreet.

Sulphuric Acid,	Spec. Grav.	1·85
Ditto	ditto	1·25
Nitric Acid,	ditto	1·45
Ditto	ditto	1·25
Ditto	ditto	1·10
Muriatic Acid,	ditto	1·12

Diſtilled Vinegar.
Oxalic Acid.

Potaſh.
Solution of ditto.
Soda.

Solution of ditto.
Ammonia.
Barytes.
Solution of ditto.
Strontian.
Solution of ditto.
Lime Carrara.
Solution of ditto.

Carbonat of Potaſh.
Solution of ditto.
Carbonat of Soda.
Solution of ditto.
Carbonat of Ammonia.
Carbonat of Barytes.
Ditto of Strontian.
Ditto of Lime Carrara Marble.
Solution of Nitrat of Lime.
Ditto ditto of Silver.
Ditto ditto of Mercury.
Ditto ditto of ditto, with heat.

Solution of Nitrat of Barytes.
Ditto ditto of Strontian.
Solution of Muriat of Ammonia.
Ditto ditto of Barytes.
Ditto ditto of Strontian.
Ditto ditto of Lime.
Acetite of Barytes.
Ditto of Lead.
Solution of Pruſſiat of Potaſh.
Ditto of ditto of Lime.
Sulphure of Potaſh.
Ditto of Ammonia.
Ditto of Lime.
Ammoniated Copper.
Alkohol.
Spirituous Tincture of Galls.
Ditto ditto of Soap.
Tincture of Litmus.
Ditto of Fernambuc.
Ditto of Turmeric.
Tinged Papers of all Kinds for Teſts.

Stoppered Flint and Green Glaſs Bottles in Sizes.

Pulverized Cryſtals of Pure Tartar, and the principal Neutral Salts pure, ready for Solution in Diſtilled Water.

Diſtilled Water.

Borax.

Glaſs of Borax.

Microcoſmic Salt.

Glaſs of Phoſphorus.

Calcined Soda.

Black Flux.

White Flux.

Nitre.

Sulphur.

Sandiver.

Arſenic, White and Yellow.

Ceruſſe.

Litharge.

Minium.

Silex.

Wax.
Pitch.
Elaſtic Gum.
Prepared Tallow.
Ditto Soap.
Pulverized Green Glaſs.
Pine Saw-duſt.

Simple or Compound Subſtances prepared, agreeably to Order, for Chemical or Mineralogical Experiments.

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